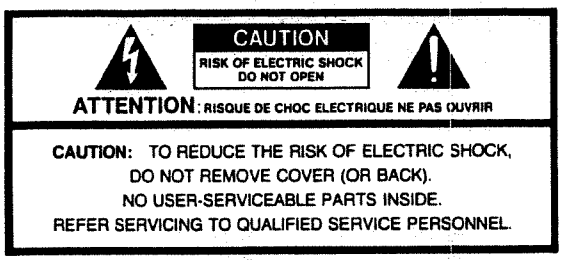
Roland

Roland Digital Piano
HP 3800/2800

OWNER'S MANUAL



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. Avoid using the product where it may be affected by dust.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Do not tread on the power-supply cord.
11. Do not pull the cord but hold the plug when unplugging.
12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the product; or
    C. The product has been exposed to rain; or
    D. The product does not appear to operate normally or exhibits a marked change in performance; or
    E. The product has been dropped, or the enclosure damaged.
15. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

For Canada

For Polarized Attachment Plug

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Thank you for purchasing the Roland HP-3800/2800 Digital Piano.

The HP-3800/2800 faithfully reproduces the thunderous lows, resonant mids and sparkling highs of a concert grand piano. A wealth of expressive power is literally at your fingertips in a keyboard that is a joy to play. And because it's an electronic instrument, it will never need turning to retain its sound quality.
Before you begin, please take a look at this manual. The information here tells you how to operate and maintain your instrument properly. With a little care and attention, your HP-3800/2800 will provide you with many years of trouble-free service.

FEATURES

- **Eight Different Voices (Sounds)** **Page 8**

  The selection of Voices includes a superb grand piano and a classically refined harpsichord. There is also a vibraphone, well-suited for jazz, and an electric piano, indispensable for pop and fusion.

- **Stereo Presence Feature**

  The Stereo Presence effect adds a luxuriant, voluminous wash of reverberations to the sound. The effect is most pleasant when heard through headphones.

- **A Layer Function** **Page 8**

  Any two Voices (except Honky-tonk) can be combined and played together.

- **Digital Effects — Chorus and Reverb** **Page 9**

  Your new piano provides two digital effects: Chorus, which adds warmth and fullness to sounds; and Reverb, which simulates the ambiance of a concert hall.

- **A Metronome** **Page 11**

  The instrument's metronome allows you to set the beat (Time Signature), tempo and volume.

- **Adjustable Keyboard Sensitivity (Key Touch)** **Page 12**

  Four Key Touch levels are available, allowing you to match the instrument to your playing needs.

- **A Recorder** **from Page 14**

  An easy-to-operate recorder allows you to record and play back your performances. By using 2 tracks, you can enjoy the advantages of multi-track recording.

- **A Damper Pedal** **Page 18**

  When the Damper pedal of an acoustic piano is depressed, strings adjacent to the notes played also resonate, creating much richer sonorities. Thanks to a realistic simulation of sympathetic resonance, the HP-3800/2800 piano can also achieve this effect. Moreover, a half-pedaling technique can provide further control.

- **Comprehensive Tuning Options**

  The HP-3800/2800 provides a convenient selection of tuning options which allow you to easily change the instrument's tuning. This allows you to select an authentic tuning for a particular piece of music.

Master Tuning Page 12

The overall pitch of the piano can be altered by turning this knob.

Classical Tunings (Temperament) Page 20

A selection of classical tunings are provided. As a result, you can (for example) greatly enhance the authenticity of a Baroque interpretation.

Stretched Tuning Page 22

This function offers three options for Stretched Tuning that are unique to the piano. They result in even higher pitches in the upper range, and deeper bass notes in the lower range.

- **MIDI Connectors** **from Page 23**

  The instrument's MIDI capability allows you to expand your music system to include other keyboards, sound modules and sequencers.

Advanced SA Process Sound Source

The sounds produced by this instrument are created using the Advanced SA Process, which represents Roland's latest digital technology. The ASA process is based on the SA process, which involves a series of efforts; first, an analysis of the properties of sound as generated by musical instruments, then an extraction, and finally a re-synthesis designed to facilitate the expressive needs of musicians. The result is a sound generation method which provides finely textured and realistic sounds.

Table of Contents

Important Notes

In addition to the items listed under Safety Precautions inside the front cover, please read and adhere to the following:

Power Supply

- When making any connections with other devices, always turn off the power to all equipment first; this will help prevent damage or malfunction.

- Do not use this unit on the same power circuit with any device that will generate line noise, such as a motor or variable lighting system.

Placement

- Using the unit near power amplifiers (or other equipment containing large transformers) may induce hum.

- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.

- Do not expose this unit to temperature extremes (eg. direct sunlight in an enclosed vehicle can deform or discolor the unit) or install it near devices that radiate heat.

- Make sure you always have the instrument placed so it is level and sure to remain stable. Otherwise, if played while tilted, you risk causing damage to the keyboard as a result of the unnatural degree of force that might be applied to certain parts of it.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth (or one that has been slightly dampened with water). To remove stubborn dirt, use a mild neutral detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.

- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the risk of discoloration and/or deformation.

Additional Precautions

- Protect the unit from strong impact.

- Watch your fingers when opening or closing the cover. Smaller children might need some help.

- Please try to either keep the volume low, or use headphones when playing the instrument late into the night or very early in the morning, in order to not become a source of discomfort for your neighbors.

- Before using the unit in a foreign country, consult with qualified service personnel.

Assembling the KS-3800 Stand for the HP 3800

You will need to have a coin ready to use when assembling the stand. Two people are needed to carry out the assembly. Never attempt it alone.

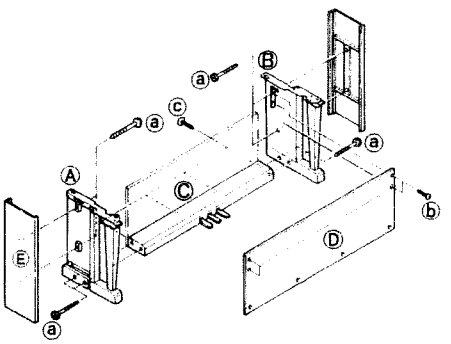
* **To move the main unit, be sure to keep it level while you lift it straight up. Be very careful, so as to avoid getting fingers pinched, or toes hurt by accidentally dropping the unit.**

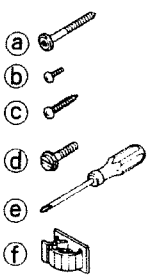
■ Check the parts

Before you begin assembly, check that you have all the following parts.

- Ⓐ Side board (left) 1
- Ⓑ Side board (right) 1
- Ⓒ Pedal board 1
- Ⓓ Rear board 1
- Ⓔ Side cover 1

- ⓐ Long screws (M6 × 60 mm) 8
- ⓑ Short screws (M4 × 15 mm) 4
- ⓒ Pointed screws (4 × 25 mm) 4
- ⓓ Connecting pins 2
- ⓔ Philips screwdriver 1
- ⓕ Cord clamps 2





■ Assembly procedure

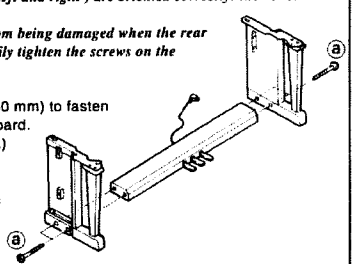
1 Attach the side boards (left and right) to the pedal board.

Note *Extend the pedal cable out from the pedal board.*

Note *Be sure that the side boards (left and right) are oriented correctly: the veneer surfaces are on the inside.*

Note *To prevent the side boards from being damaged when the rear board is fit to them, temporarily tighten the screws on the side boards.*

① Use the long screw ⓐ (M6 × 60 mm) to fasten the side boards to the pedal board. (Use two screws for each side.) To tighten the screws, slightly lift up the pedal board so that its threaded holes align with the holes of the side boards.



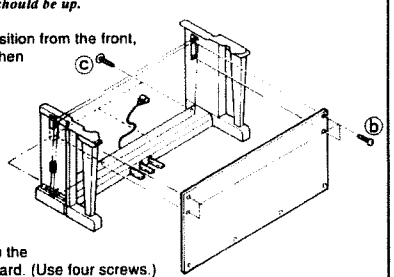
2 Attach the rear board.

Note *Be sure that the rear board is oriented correctly: the end with two through holes on the right and left sides should be up.*

② Fit the rear board into position from the front, as shown in the figure. Then completely tighten the screws on the side boards.

③ Use the short screws ⓑ (M4 × 15 mm) to fasten the rear board to the side boards. (Use two screws for each side.)

④ Use the pointed screws ⓒ (4 × 25 mm) to fasten the rear board to the peal board. (Use four screws.)

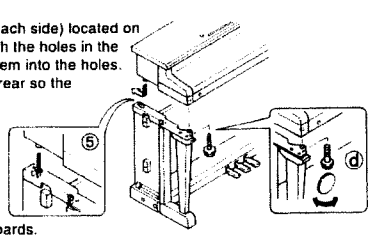


3 Attach the piano to the stand.

Note *When placing the piano on the stand, be careful not to pinch your fingers. (Avoid holding the ends of the piano.)*

⑤ Align the screws (one on each side) located on the bottom of the piano with the holes in the metal fittings, and insert them into the holes. Slide the piano toward therear so the screws slide into position.

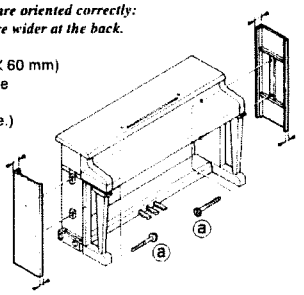
⑥ Insert the connecting pins ⓓ into the threaded holes on the bottom of the piano through the holes in the metal fittings of the side boards. (one on each side)



4 Attach the side covers.

Note *Be sure that the side covers are oriented correctly: the rims of the side covers are wider at the back.*

⑦ Use the long screws ⓐ (M6 × 60 mm) to fasten the side covers to the side boards from the inside. (Use two screws for each side.)

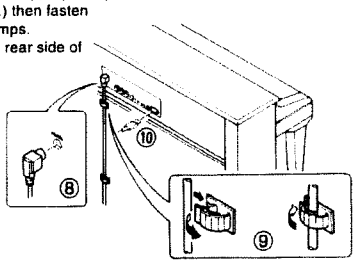


5 Fasten the pedal cord with the cord clamps; and plug in the pedal cord and the power cord.

⑧ Plug the pedal cord into the jacks on the rear side of the piano.

⑨ Affix the cord clamps ⓕ on the appropriate positions at the back of the rear board (See the figure below.) then fasten the pedal cord using the clamps.

⑩ Plug the power cord into the rear side of the piano. (The power cord is supplied with the piano.)

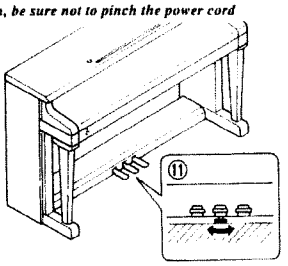


6 Rotate the adjusting bolt.

Note *If the piano is placed on carpeting, rotate the adjusting bolt a little more so it is properly supported by the floor.*

Note *When placing the piano in its location, be sure not to pinch the power cord underneath the piano.*

⑪ After the piano has been assembled and installed in its location, rotate the adjusting bolt on the bottom of the rear board until it completely touches the floor.



Assembling the KS-2800 Stand for the HP 2800

Two people are needed to carry out the assembly. Never attempt it alone.

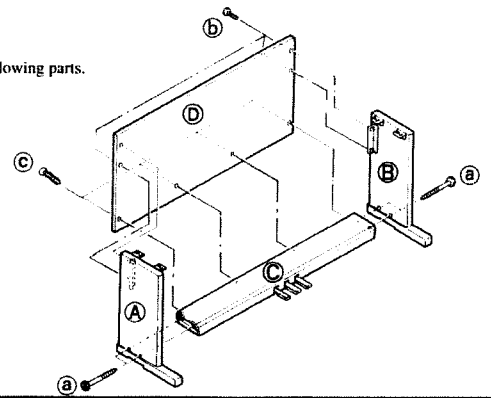
* **To move the main unit, be sure to keep it level while you lift it straight up. Be very careful, so as to avoid getting fingers pinched, or toes hurt by accidentally dropping the unit.**

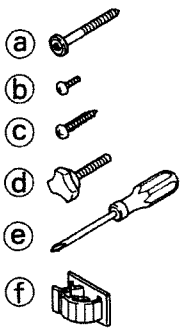
■Check the parts

Before you begin assembly, check that you have all the following parts.

Ⓐ Side board (left) 1
Ⓑ Side board (right) 1
Ⓒ Pedal board 1
Ⓓ Rear board 1

ⓐ Long screws (M6 × 60 mm) 4
ⓑ Short screws (M4 × 15 mm) 4
ⓒ Pointed screws (4 × 25 mm) 4
ⓓ Knob bolts 2
ⓔ Philips screwdriver 1
ⓕ Cord clamps 2



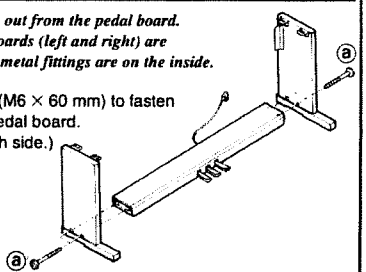


■Assembly procedure

1 Attach the side boards (left and right) to the pedal board.

Note *Extend the pedal cable out from the pedal board.*
Note *Be sure that the side boards (left and right) are oriented correctly: the metal fittings are on the inside.*

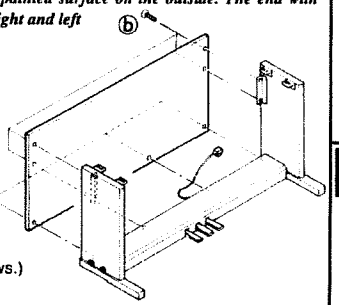
① Use the long screws ⓐ (M6 × 60 mm) to fasten the side boards to the pedal board. (Use two screws for each side.)



2 Attach the rear board.

Note *Be sure that the rear board is oriented correctly: the grainy surface is on the inside, and the black - painted surface on the outside. The end with two through holes on the right and left sides should be facing up.*

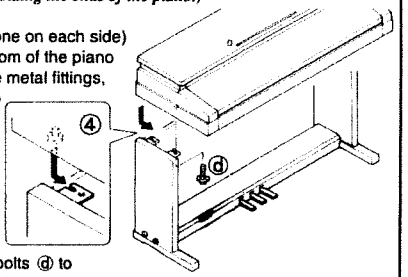
② Use the short screws ⓑ (M4 × 15 mm) to fasten the rear board to the side boards. (Use two screws for each side.)
③ Use the pointed screws ⓒ (4 × 25 mm) to fasten the rear board to the pedal board. (Use four screws.)



3 Attach the piano to the stand.

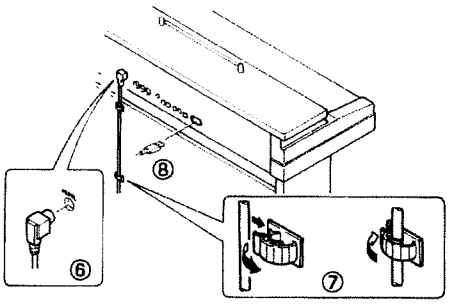
Note *When placing the piano on the stand, be careful not to pinch your fingers. (Avoid holding the ends of the piano.)*

④ Align the screws (one on each side) located on the bottom of the piano with the slots in the metal fittings, and slide the piano toward the front so the screws slide into position.
⑤ After the piano si secured to the metal fittings, use the two knob bolts ⓓ to fasten the piano to the stand. (one on each side)



4 Fasten the pedal cord with the cord clamps; and plug in the pedal cord and the power cord.

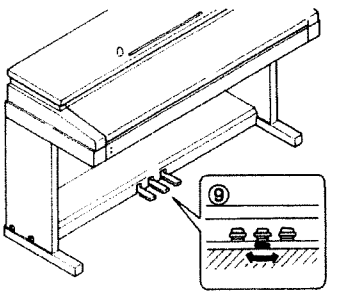
⑥ Plug the pedal cord into the jacks on the rear side of the piano.
⑦ Affix the cord clamps ⓕ on the appropriate positions at the back of the rear board (See the figure below.) then fasten the pedal cord using the clamps.
⑧ Plug the power cord into the rear side of the piano. (The power cord is supplied with the piano.)



5 Rotate the adjusting bolt

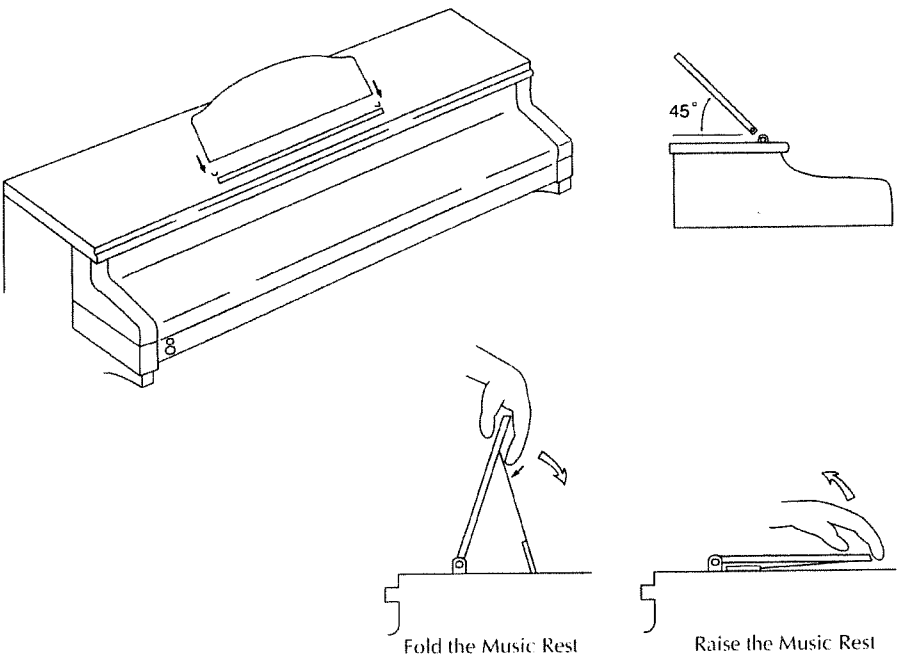
Note *If the piano is placed on carpeting, rotate the adjusting bolt a little more so it is properly supported by the floor.*
Note *When placing the piano in its location, be sure not to pinch the power cord underneath the piano.*

⑨ After the piano has been assembled and installed in its location, rotate the adjusting bolt on the bottom of the rear board until it completely touches the floor.



Setting Up the Music Rest

Attach the Music Rest:

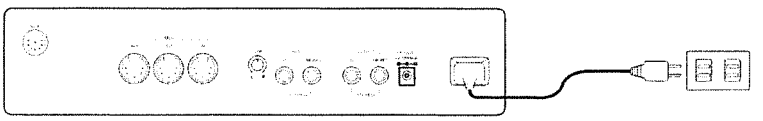


Note : If you attach the rest so the rear part is at an angle other than 45 degrees, you will not be able to remove it. If you forcibly attempt to do so, you risk causing damage.

* **Remove the Music Rest before moving or shipping the instrument.**

Turning the Power On

1 Insert the plug on the power cord into an outlet.

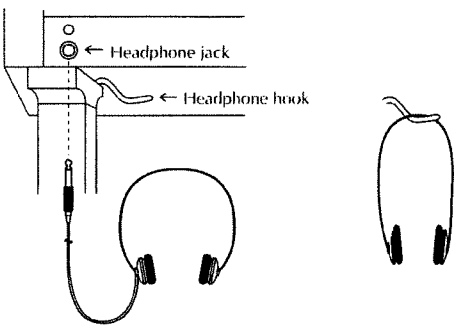


2 Turn the power ON.
(Press the **POWER** switch on the left side of the panel.)

* **This unit is equipped with a circuit protection device. A brief interval after power up is required before the unit will operate.**
Also, a clicking sound will be heard about 2 seconds after the power switch has been turned on. This is normal and should not be cause for concern.

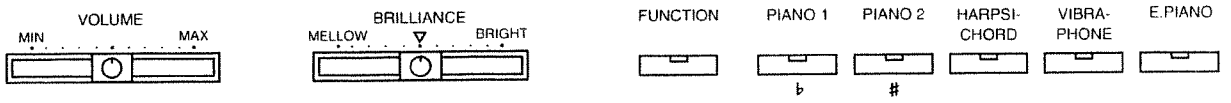
Using Headphones

To use headphones, insert the plug into the jack located on the left side of the instrument.



* **HP-3800 owners can hang their headphones on the hook provided.**
* **Use the VOLUME slider on the panel to adjust the volume.**
* **The instrument's speakers are cut off once you have headphones connected. This is convenient when you wish to play without disturbing others.**

Getting Started



Adjusting the Volume

Use the **VOLUME** slider to control the volume. The volume level increases as the slider is moved toward MAX.

Adjusting the Brilliance (Tone)

Use the **BRILLIANCE** slider to adjust the overall tone quality. The sound becomes brighter as the slider is moved toward BRIGHT.

Selecting the Voice (Sound)

Press **one of the Voice buttons** to select the desired sound:

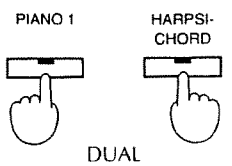
PIANO 1	A rich concert grand piano sound
PIANO 2	The sound of a somewhat smaller grand piano
HARPSICHORD	A refined harpsichord sound, indispensable for Baroque themes
VIBRAPHONE	The sound of a large vibraphone
E.PIANO	The sound of a contemporary electric piano
PIPE ORGAN	A Cathedral pipe organ
STRINGS	A lush string ensemble
HONKY-TONK*	The bright, fun-filled sound of a piano slightly out of tune

* Simultaneously press **PIANO 1** and **PIANO 2**

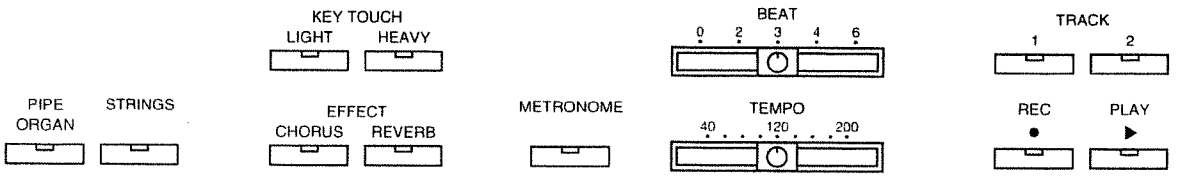
The Layer Function

The Layer function allows two different Voices to be combined (layered) and played simultaneously. You may wish to experiment with the creative possibilities of combining Voices.

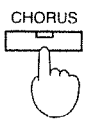
To layer sounds, simple press any two Voice buttons simultaneously (such as **PIANO 1** and **HARPSICHORD**).



- **When you layer PIANO 1 and PIANO 2 you get a Honky-Tonk piano sound.**
- **When sounds are layered, the effects setting for the Voice whose button is on the left will apply to the layered pair.**



Adding Chorus



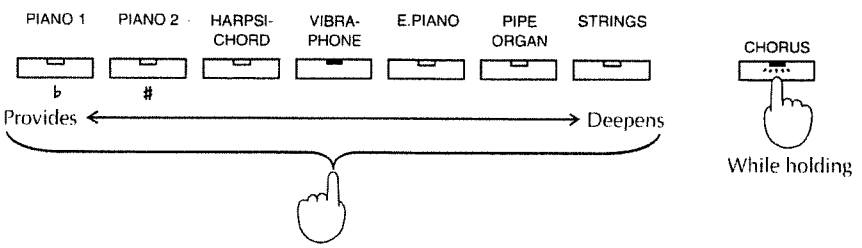
Press the **CHORUS** button to turn the Chorus effect On and Off. When On, the button's indicator will light.

* **Chorus On/Off can be set independently for each Voice.**
* **If you hold down a Voice button while you press the CHORUS button, you can store the setting for CHORUS (either ON or OFF) along with that Voice.**

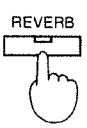
You can select from seven different Chorus levels:

1 Hold down the **CHORUS** button for a moment and the indicator will start to flash.

2 With the **CHORUS** button depressed, pressing a Voice button will select the depth.



Adding Reverb



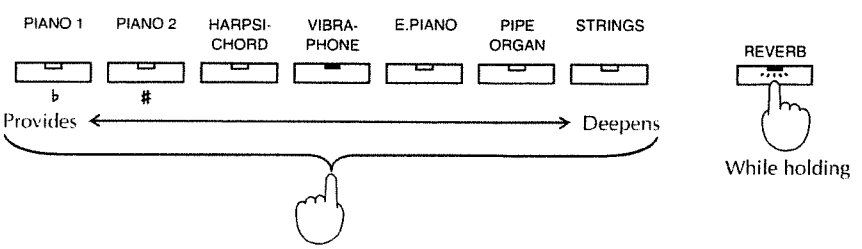
Press the **REVERB** button to turn the Reverb effect On and Off. When On, the button's indicator will light.

* **Reverb On/Off cannot be set independently for each Voice.**

You can select from seven different Reverb levels:

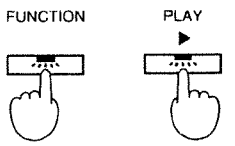
1 Hold down the **REVERB** button for a moment and the indicator will start to flash.

2 With the **REVERB** button depressed, pressing a Voice button will select the depth.



Listening to the Demonstration Songs

1 Press the **FUNCTION** and **PLAY** buttons simultaneously (both buttons will start to flash). In a few seconds the Demo songs will start to play.



2 When one song finishes, the next one will start playing automatically.
If you only wish to listen to one song, press the **FUNCTION** and **PLAY** buttons simultaneously; then within several seconds, press either the **PIANO 1** or **PIANO 2** button. **PIANO 1** selects the first song and **PIANO 2** selects the second one.

3 To stop playback of one song and have the other one play, simply press the other Voice button.
To stop playback of the demonstration songs, press the **FUNCTION** or **PLAY** button once again. The instrument will return to the standard mode.

Voice Buttons	Composer	Song Name	Player
PIANO 1	Chopin	from "Nocturne in E-flat Major op.9-2"	Kaori Koyama
PIANO 2	Naoki Nishi	Laid-back Copyright © 1992, Naoki Nishi	Naoki Nishi

Profile of the demo song composer

Naoki Nishi
Born in 1958 in Hiroshima.
Began working professionally at the age of 21. Has so far released 8 albums on which he is featured. He has also taken part in numerous other albums. His broad range of activities have included appearances at a number of jazz festivals in Japan and other parts of the world. In addtion to his duties as an instructor at the Tokyo Conservatoire Shoubi, he has provided his services as a demonstrator for Roland since 1990. He is considered to be one of Japan's finest jazz pianists.

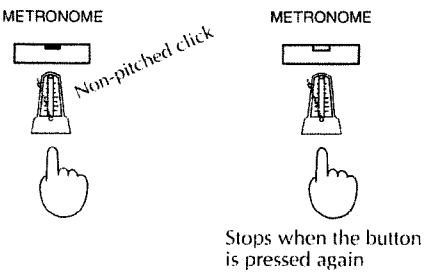
Profile of the demo song player

Kaori Koyama
Kaori was born in 1965 in Nagano.
At the All Japan Student's Music Competitions of 1982, she won the 1st prize. After graduating from the piano program of the Toho Gakuen School of Music, she began studying at *Hochschule für Musik München* in the autumn of 1988. In 1990 she won a prize at the 36th Maria Canals International Piano Competition. In July of the same year she completed her Master's degree at *Hochschule für Musik München*. After returning to Japan, she was featured in a piano recital, and was very favorably received.

Personal Preferences

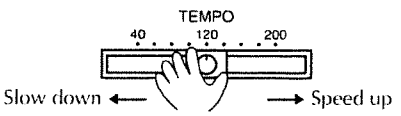
Using the Metronome

The metronome can be used while you play to help you with your practice. Press the **METRONOME** button, and its indicator will light. The metronome will start sounding.



• Changing the Speed (Tempo) of the Metronome

Use the **TEMPO** slider to adjust the tempo.



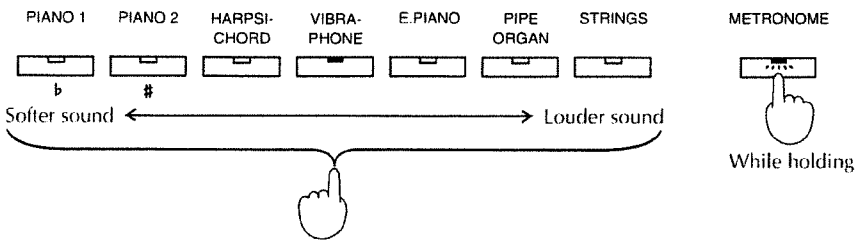
* **The tempo can be set anywhere between 40 and 200 beats per minute.**

* **The indicator on the METRONOME button will flash at the set tempo.**

• Changing the Metronome Volume

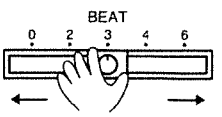
1 Press and hold the **METRONOME** button until its indicator begins to flash.

2 While still holding the **METRONOME** button, press the appropriate Voice button to select the desired volume level.



• Changing the Beat (Time Signature) of the Metronome

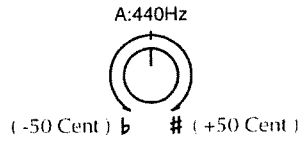
Use the **BEAT** slider to select the desired beat (Time Signature):



* **The available Time Signatures are: 0/4, 2/4, 3/4, 4/4, & 6/4.**
When set to 0/4, no accented beat will sound.

Master Tuning

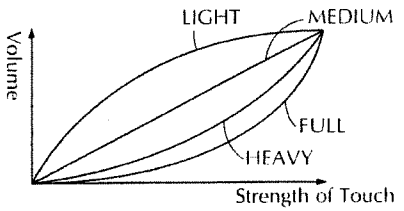
Using the Tuning knob located on the rear of the instrument, the overall pitch of the piano can be adjusted to match that of another instrument.



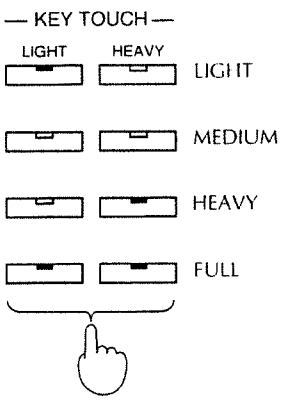
With the knob at its center position, the middle A key on the keyboard will have a frequency of 440 Hz.

Key Touch (Keyboard Sensitivity)

This setting determines the feel or sensitivity of the keyboard, that is, how much force is required to produce various volume levels. Use this function to match the keyboard to your particular playing technique. Four Key Touch settings are available: LIGHT, MEDIUM, HEAVY and FULL.



Select the desired Key Touch setting by pressing the following buttons:



Press the **LIGHT** button and the keys become more touch-sensitive and therefore require less playing force to achieve a high volume.

Press the **HEAVY** button and the keyboard will become much less sensitive. When set this way, the keys will feel heavier, and you will need to play harder to obtain a higher volume.

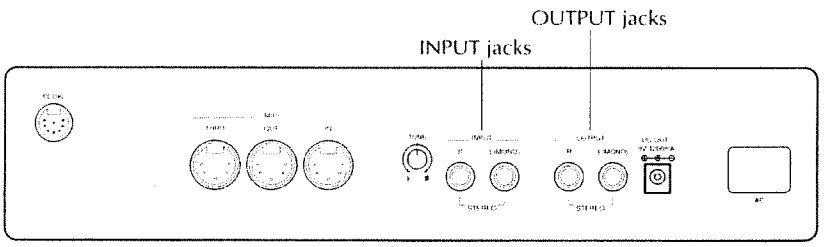
To obtain the FULL setting, press the **LIGHT** and **HEAVY** buttons simultaneously. With this setting, you will really need to play hard to obtain loud sounds!

* **To return the instrument to the MEDIUM Key Touch setting, press whichever buttons are lit (and confirm that their indicators go out).**

Connecting External Devices

- **To connect an external device and have its sound output through the piano's speakers:**
  Use audio cables to connect the OUTPUT jacks on the external device (such as a sound module), to the INPUT jacks on the HP-3800/2800.

- **When you wish to output the HP-3800/2800's sound through external speakers:**
  Use audio cables to connect the OUTPUT jacks on the piano to the INPUT jacks on a stereo system, amplifier, or mixer.



Connections:

1. Turn down the volume on both the HP-3800/2800 and the external unit.
2. Turn off both devices.
3. Make the appropriate connections.
4. Turn on both devices.
5. Adjust the volume on both devices.

* **If you do not wish to have sound come from the piano's speakers, connect a pair of headphones to the piano.**

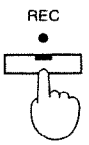
* **Power can be drawn from DC OUT when using the MT-200, PR-1, or RA-50/90.**
You simply need to purchase a specialized DC Cord (available separately). (Use of the AC adapter then becomes unnecessary.)
Please consult with the store where you purchased this unit in order to obtain the DC Cord (Product Name:DC-100, Part No. 23485333).

Record Function

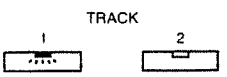
Record a Performance

Record your favorite song with any sound. You could also record an accompaniment first, then listen to it while you enjoy playing the melody.

1 Select the Voice you wish to use for the recording. Then make any other selections you wish, such as for Chorus, Reverb, or the metronome.
When ready, press the **REC** button (its indicator will light). This is the Record Standby mode.



2 The Track button (for the track you are going to record) will begin to flash. (Track 1 is selected by default.)
If you wish to record on a different track (one where the indicator is not flashing), press that Track's button. Confirm that the indicator begins to flash.
At this point you can change the tempo and/or metronome beat if you wish.



3 Press the **PLAY** button and recording will begin after a one measure count-in by the metronome. Start playing after the count-in.

Alternately, you can skip the count-in, and have the recording begin the moment you start playing.

* **Nothing you play during the count-in measures will be recorded.**

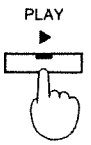
4 When you are finished, press either the **REC** or **PLAY** button to stop recording. The instrument returns to the standard mode.
When you have finished recording, the Track button will light.

* **During recording you can change Voices as you wish.**
* **Neither the tempo or beat can be changed during recording.**
* **You can record up to approximately 2,500 notes. However, each press of a pedal will also be recorded, so the actual number of notes may be less.**
* **During Recording —**
  When the Recorder approaches its memory capacity...
  ...the indicator on the **REC** button will start flashing.
  If you continue recording...
  ...the **REC** indicator will begin flashing faster.
  When the Recorder memory is full...
  ...the indicator on the **REC** button will go out, and recording stops automatically.
* **If you record on a track that already contains performance data, the existing data will be replaced by the new performance. To overwrite the existing data on either track, first press the relevant track button so that it begins to flash.**

Playback Your Performance

1 Press the **PLAY** button (its indicator will light). What you recorded will be played back.

* **Although you can change Voices during recording, you cannot change them during playback. In addition, while you cannot change the tempo during recording, you can do so during playback. The Beat cannot be changed during recording or playback.**



2 Press either the **REC** or **PLAY** button to stop playback. The piano returns to its standard mode.

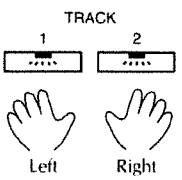
* **During recording or playback you can mute the performance on a particular track by pressing the relevant TRACK button (its indicator will go out).**

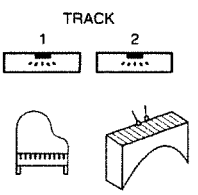
* **To erase all the performance data in a track, hold down the relevant TRACK button and press the REC button.**

* **The performance data that you record on this instrument will remain in memory for up to 8 hours after the power is turned off. If you need a more permanent form of storage for your songs, you will need to record them on floppy disks using an external sequencer.**

Multi-Track Recording

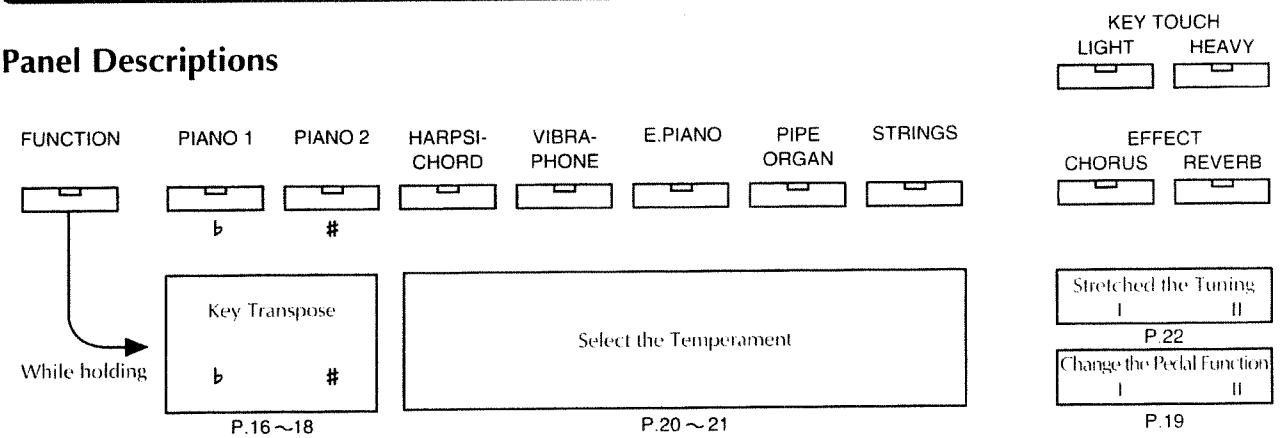
The tracks can be used creatively to independently record the right and left hand parts of a piano piece, or to record duet pieces using different instrument sounds.





The Function Buttons

Panel Descriptions



* **The piano cannot be played while the FUNCTION button is active.**

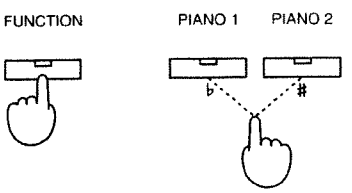
Key Transposition

Key Transposition allows you to play in a key that matches a vocal accompaniment.

While holding down the **FUNCTION** button, press either **PIANO 1** (♭) or **PIANO 2** (#) as required to obtain the desired transposition:

\# ..... The pitch is raised by 1 semitone each time the button is pressed. (Max. of 5 semitones.)

♭ ..... The pitch is lowered by 1 semitone each time the button is pressed. (Max. of 6 semitones.)

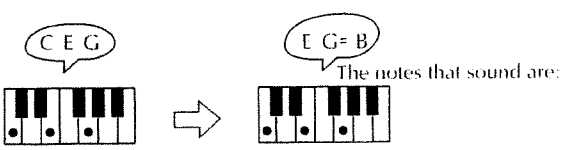


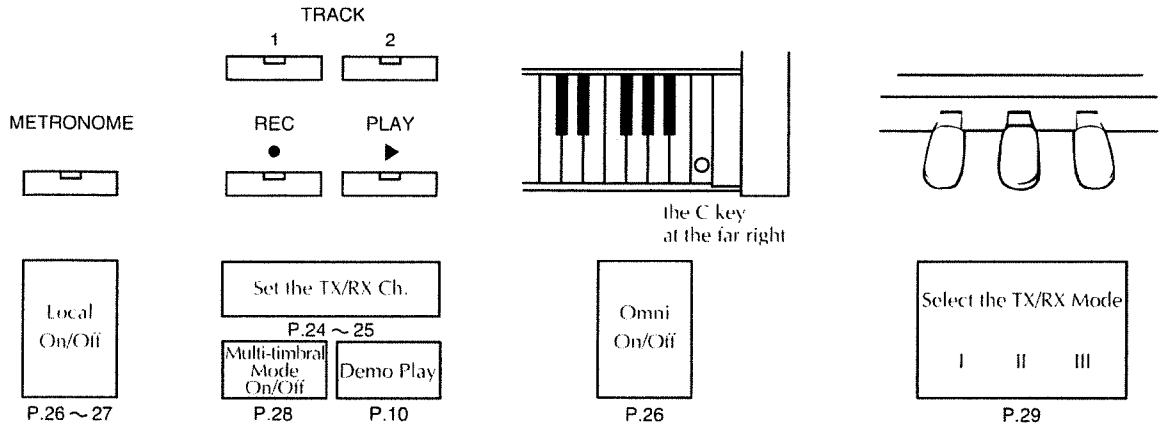
If you press **PIANO 1** and **PIANO 2** simultaneously while holding down the **FUNCTION** button, you will be returned to the key of C.

Ex. 1 Suppose you have a piece in E major that you wish to play in the key of C. Considering that do is the tonic of the key of C, you must move up four semi-tones before reaching mi, which is the equivalent of do in the key of E. Therefore, you would need to hold down the **FUNCTION** button while you press the **PIANO 2** (#) button 4 times.

Chart 1

PIANO 2 (#) button	Once	Twice	3 times	4 times
Pitch of the C key	C C#	D	D#	E
Key	(C)	(D)		(E)

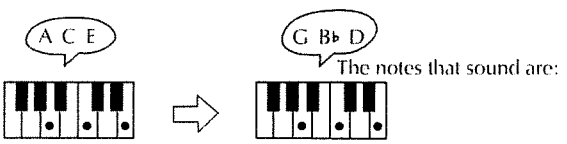




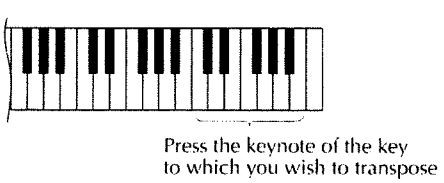
Ex. 2 Suppose you have a piece in G minor that you wish to play in the key of A minor. Considering that la is the tonic of A minor, you must move down two semi-tones before reaching so, which is the equivalent of la in the key of G minor. Therefore, you would need to hold down the **FUNCTION** button while you press the **PIANO 1** (♭) button 2 times.

Chart 2

PIANO 1 (♭) button	Once	Twice	
Pitch of the C key	A	A♭	G
Key	(Am)		(Gm)

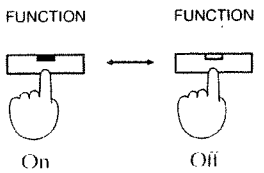


- Whenever you have a piece of music that you wish to play in the key of C, you can use another, simpler method to make the necessary transposition setting. All you have to do is specify which note you wish to sound when the C key (do in the key of C) is pressed. For example, to play an E major piece in C major, you would simply set it so mi (the equivalent of do in E major) is played when you press the C key. To do so, hold down the **FUNCTION** button while you press mi (E) in the top octave of the keyboard.



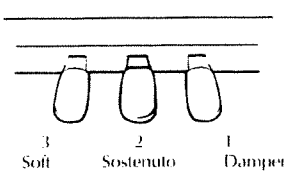
Whenever the pitch of the instrument has been transposed, the indicator on the **FUNCTION** button will remain lit.
To return the piano to standard pitch, press the **FUNCTION** button (its indicator will go out).
If you wish to transpose the pitch again, simply press **FUNCTION** again (the indicator will light).

* **The transposition setting is retained in memory until you press the FUNCTION button again.**



* **If you have used the Key Transpose function to raise the pitch, the keyboard's 5 highest notes (at the far right) will sound one octave lower than normal when playing organ or string sounds.**

Pedal Functions



1 The Damper Pedal

When the Damper pedal is depressed, notes that have been played will continue to sound even after you release those keys on the keyboard. The duration of sustained sounds can be controlled by varying the amount by which the pedal is depressed.

- **Half-Pedal Technique**

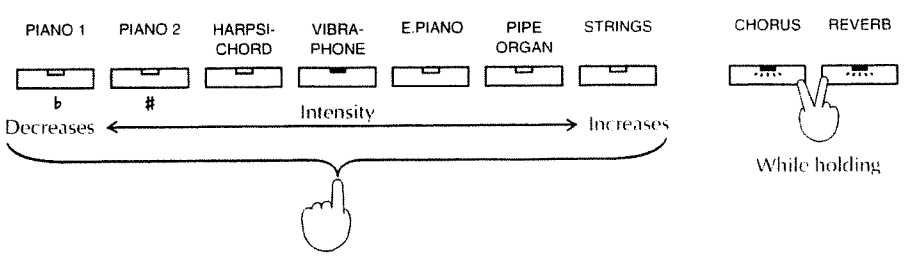
  This instrument allows you to make use of half-pedaling, an advanced technique used by many skilled pianists. Half-pedaling involves using the Damper pedal skillfully to gain precise, subtle control over the length of time that notes will continue to sound.

- **Sympathetic Resonance**

  Depressing the Damper pedal adds a broad, rich resonance to the notes you play, similar to the sympathetic resonance effect of acoustic pianos. (Sympathetic Resonance occurs because adjacent strings begin to resonate in response to notes actually played.)You can even control the intensity of this resonance effect.

1 Press the **CHORUS** and **REVERB** buttons simultaneously (both indicators will flash).

2 Now you can use the Voice buttons to select the intensity level you desire.



2 Sostenuto Pedal

This pedal is used to sustain only those notes that are played at the very moment the pedal is depressed. It conveniently allows you to sustain only specific notes.

3 Soft Pedal

If you have the Soft pedal depressed while you play, a softer sound is obtained. The pedal's effect can be varied by small degrees by altering the depth of the pedal.

The Soft pedal and Sostenuto pedal can be assigned different functions if you so wish.

I. Adjusting the volume of Layer Voices

When layering the organ or string sounds in the Dual mode, the soft pedal can be used to control the volume. The farther you depress the pedal, the louder the sound becomes.

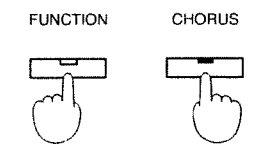
If you release the Soft pedal, the strings or organ sound will be cut off.

* **When using the Dual feature with organ and string sounds you will only be able to adjust the volume of the string sound.**

While holding down the **FUNCTION** button, press the **CHORUS** button to assign Function I to the Soft pedal.

While the **FUNCTION** button is held down, the indicator on the **CHORUS** button will light.

To cancel this pedal assignment, and return the pedal to its original function, again hold down the **FUNCTION** button and press the **CHORUS** button.



While holding

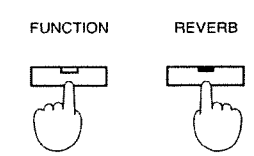
II. Changing Voices

You can set the Sostenuto pedal so that it switches between currently used Voices and previously selected Voices.

While holding down the **FUNCTION** button, press the **REVERB** button to assign Function II to the Sostenuto pedal.

While the **FUNCTION** button is held down, the indicator on the **REVERB** button will light.

To cancel this pedal assignment, and return the pedal to its original function, again hold down the **FUNCTION** button and press the **REVERB** button.



While holding

Classical Tuning

Your new piano allows you to play classical music (Baroque or Renaissance, for example), using the tuning system popular at the time the music was written. This lends a degree of authenticity to your performances.

Nowadays, most music is written for instruments which use Equal Temperament, the tuning most commonly used today. During the course of the development of classical music, however, a number of other tunings were also in common use. By playing a particular piece with the tuning of the period, you will be able to enjoy the sonorities that the chords were originally meant to have.

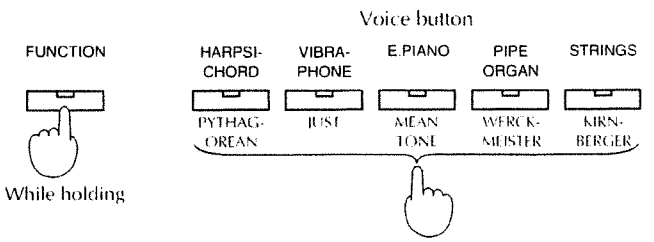
Button Used for Selection	Tuning Method	Features
HARPSICHORD	PYTHAGOREAN	Developed by the philosopher/mathematician Pythagoras as a method of tuning which resolved the ambiguity of fourths and fifths. As a result, melodies sound cleaner but a certain amount of ambiguity is produced with triads.
VIBRAPHONE	JUST	A method of tuning which resolved the ambiguity of fifths and thirds. Quite beautiful sonorities are produced with chords, but the scale is unbalanced and is thus not well-suited for melodies.
E.PIANO	MEAN TONE	A temperament which adds some compromises to Just temperament and facilitates transposition.
PIPE ORGAN	WERCKMEISTER	(The 3rd scale within the first group of scales.) By combining the Mean Tone and Pythagorean temperaments, it allows for playing in any key with similar results.
STRINGS	KIRNBERGER	(The 3rd scale.) As a result of improvements made to Mean Tone and Just temperament, it is relatively tolerant towards transposition, and can be used to play in all keys.

To Select a Classical Temperament:

1 Press the **FUNCTION** button.
One of the Voice buttons will light. In this case, it represents the type of tuning that is currently active.

* **If no specific choice of temperament has been made, the instrument is set to use Equal temperament. While Equal temperament is selected, none of the indicators on the Voice buttons will flash.**

2 While continuing to hold down the **FUNCTION** button, press the Voice button that corresponds to the temperament you wish to use.



Changing the Tonic

To play using a temperament other than Equal, you will need to specify the tonic (the first note of a diatonic scale; the Keynote) which pertains to the key of the piece you wish to play. (This would be the note equivalent to C for a major key, and A for a minor key.)

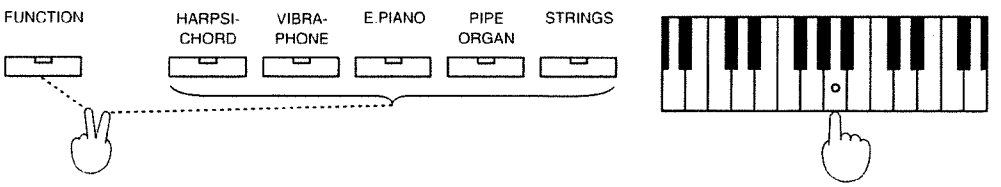
Ex.1 **For a Major Scale**

While holding down the **FUNCTION** button, simultaneously press the Voice button corresponding to the temperament you wish to use and the tonic (keynote) for the key the piece is in (which would be C for C major).

- **To play a piece in A major:**

  The tonic for A major is the note A.

  While holding down the **FUNCTION** button, simultaneously press the Voice button corresponding to the temperament you wish to use and the A key (above middle C) on the keyboard.



The keys from C_4 through C_6 can be used to make the setting

Ex.2 **For a Minor Scale**

While holding down the **FUNCTION** button, simultaneously press the Voice button corresponding to the temperament you wish to use and the tonic (keynote) of the key which has an identical number of sharps and flats as the key the piece is in.

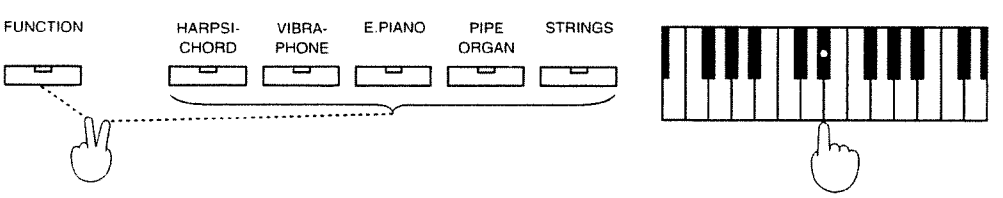
However, when using Just temperament, the manner in which the setting is made differs, due to the need for differentiating between major and minor keys and sounding the principal triads in compliance with Just temperament.

While holding down the **FUNCTION** button, simultaneously press the **VIBRAPHONE** button, the tonic of the key and the key which is a minor third above the tonic of the key that the music is written in.

- **To play a piece in the key of C minor (with temperaments other than Just)**

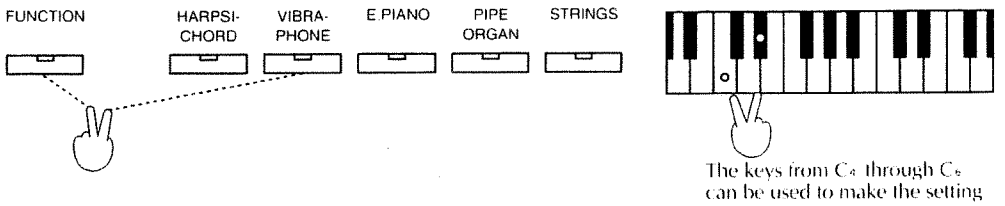
  The key which has an identical number of sharps and flats as Cm is the key of E-flat major. The keynote (tonic) for E-flat major is E♭.

  While holding down the **FUNCTION** button, simultaneously press the Voice button corresponding to the temperament you wish to use and the E ♭ key (above middle C) on the keyboard.



The keys from C_4 through C_6 can be used to make the setting

- **To play a piece in the key of C minor (With Just temperament)**
  The keynote (tonic) of Cm is C, and the key a minor third above is E♭.
  While holding down the **FUNCTION** button, simultaneously press the **VIBRAPHONE** button and the C key and the E♭ key above C on the keyboard.



* **Once a setting for the tonic has been made, it will not change even if you change temperaments.**

* **When you have selected a temperament other than Equal and play in ensemble with other instruments, certain discrepancies in pitch may occur, depending on the key being used. In such cases, use the piano's Tuning knob to adjust the pitch so it matches the tonic of the other instruments.**

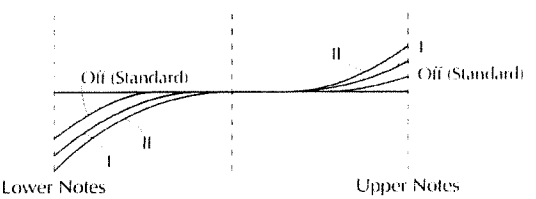
Stretched Tuning

Stretched Tuning refers to a method of tuning specific to pianos.
A piano is ordinarily tuned so that, in comparison with the pitches of Equal temperament, the lower range notes are tuned slightly lower and the higher notes are tuned slightly higher.
The Tuning Curve represents the actual pitch changes produced by a particular tuning, when compared with the pitch changes of Equal temperament.
By changing the Tuning Curve, subtle changes in chord sonorities will be heard. Choose the curve which suits your particular needs.

OFF (Standard) A natural tuning curve with most wavering or beating suppressed.

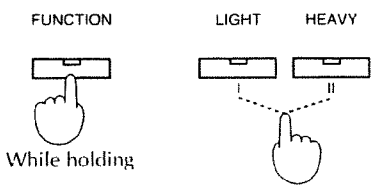
I A tuning curve which tends to emphasize the lower notes. This curve compensates for the fact that the lower notes are often perceived as being higher in pitch than they actually are.

II This tuning curve places emphasis on both the lower and upper ranges.



While holding down the **FUNCTION** button, press either the **LIGHT**(I) or **HEAVY**(II) button.
While the **FUNCTION** button is held down, the indicator on the **LIGHT**(I) or **HEAVY**(II) button will light.
To select OFF (Standard), once again hold down the **FUNCTION** button while you press the **LIGHT** or **HEAVY** button (whichever was in use). When OFF (set to Standard), the indicator will go out.

* **Even when a temperament other than Equal is used, the selected Tuning Curve will remain in effect.**
In addition, the Tuning Curve may be changed.



Using MIDI

* **Those who intend to use the piano on its own need not read this section.**

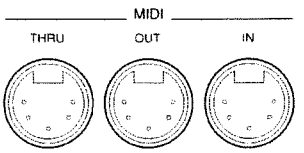
About MIDI...

MIDI (pronounced middy) stands for Musical Instrument Digital Interface. MIDI is a world-wide standard that allows musical instruments and computers to exchange musical data. Most electronic musical instruments sold today are MIDI compatible. MIDI compatible devices have MIDI connectors which are used to physically link instruments (using special cables). MIDI does not transmit the sound of an instrument, but rather messages in digital form that tell the receiving instrument to do something. These are known as MIDI messages.

- **Another MIDI keyboard or MIDI sequencer can be used to play the sounds in the HP-3800/2800.**
- **The HP-3800/2800 can be played and used to trigger other instruments or sound modules equipped with MIDI.**
- **What you play on the HP-3800/2800 can be recorded into a sequencer.**

MIDI Connectors

Three MIDI connectors are provided on the instrument's rear panel: IN, OUT, and THRU.



MIDI IN

MIDI data is received through this connector. To have the HP-3800/2800 played by a sequencer or other MIDI device, connect a MIDI cable so it runs from here to the MIDI OUT or MIDI THRU connector on the external device.

MIDI OUT

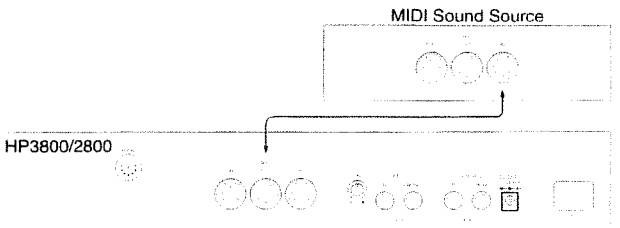
MIDI data is transmitted from this connector. To play the sounds of an external MIDI instrument or sound module, or record what you play into a sequencer, connect a MIDI cable between here and the MIDI IN connector on the external device.

MIDI THRU

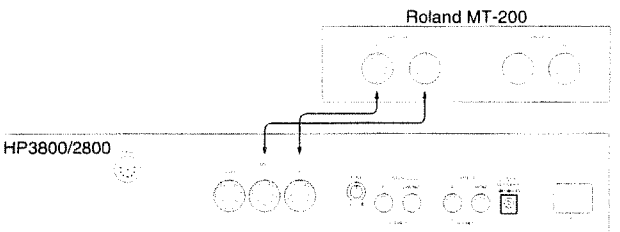
An exact copy of MIDI signals arriving at this instrument's MIDI IN connector are retransmitted from this connector.

Connections between MIDI connectors should be made using a MIDI cable as shown in the figure below (option: MSC-15/25/50).

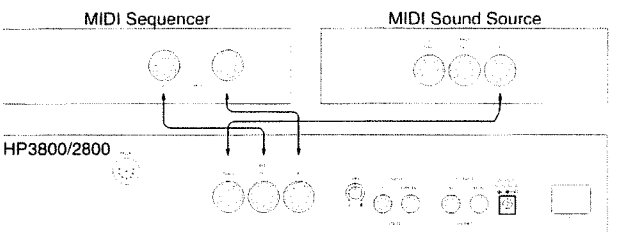
• **Connecting a MIDI sound source**



• **Connecting an MT-200**



• **Connecting a MIDI Sequencer and MIDI Sound Source**



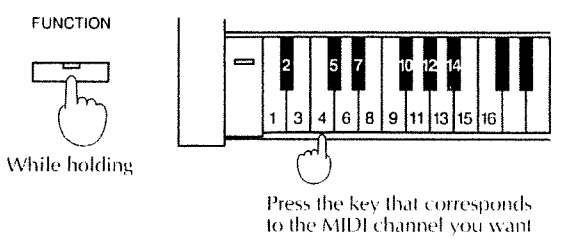
Setting the MIDI Transmit/Receive Channels

MIDI allows you to play sounds on an external unit, or change the sounds used (only if the channels (Numbered 1-16) on the transmitter and receiver match).

To match transmission and reception channels:

1 Press the **FUNCTION** button (the indicators on the **TRACK 1** and **TRACK 2** buttons should both light). If only one of them is lit, hold down the **FUNCTION** button while you press both buttons.

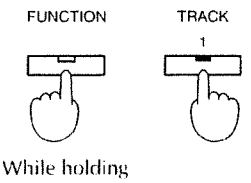
2 While holding down the **FUNCTION** button, press the key that corresponds to the desired MIDI channel.



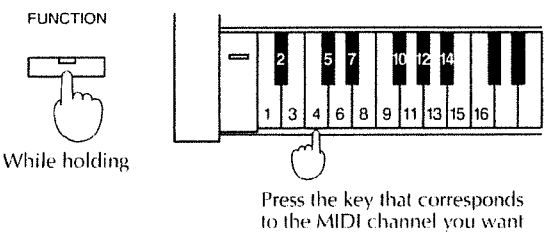
To set different transmission and reception channels:

- **Setting the Transmit Channel**

1 While holding down the **FUNCTION** button, press the **TRACK 1** button.
The indicator on the **TRACK 1** button will light (the TRACK 2 indicator will go out).

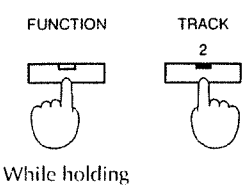


2 While still holding the **FUNCTION** button, press the key which corresponds to the desired MIDI channel.

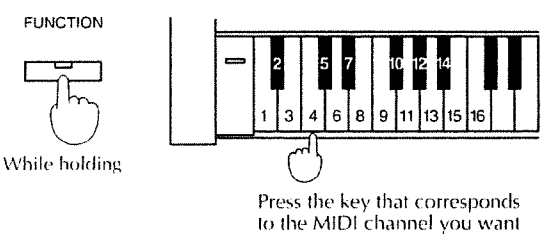


- **Setting the Receive Channel**

1 While holding down the **FUNCTION** button, press the **TRACK 2** button.
The indicator on the **TRACK 2** button will light (the TRACK 1 indicator will go out).



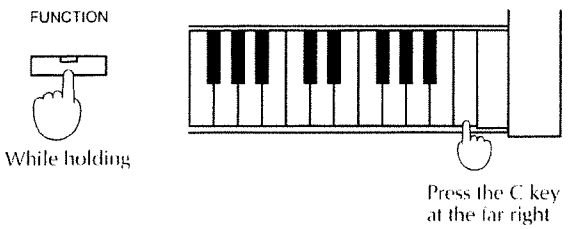
2 While still holding the **FUNCTION** button, press the key which corresponds to the desired MIDI channel.



Omni On/Off

When set to Omni On, the HP-3800/2800 will produce sound regardless of the channel that performance data is received on. This is convenient for hearing the performance data on all channels at the same time.

To set the unit to Omni On, hold down the **FUNCTION** button and press the key at the right end of the keyboard (the highest note). At the same time, both the transmission and reception channels are automatically set to channel 1.



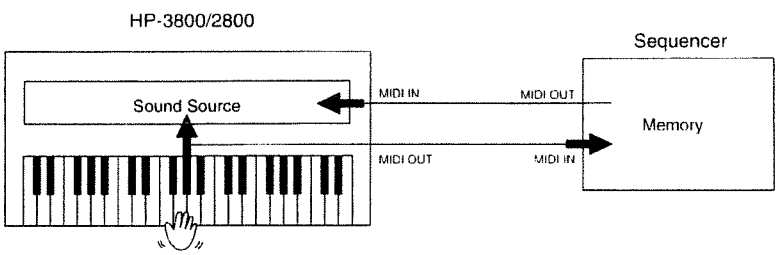
* **Whenever a setting for the Receive channel is made, the unit returns to the Omni OFF mode.**

Local On/Off

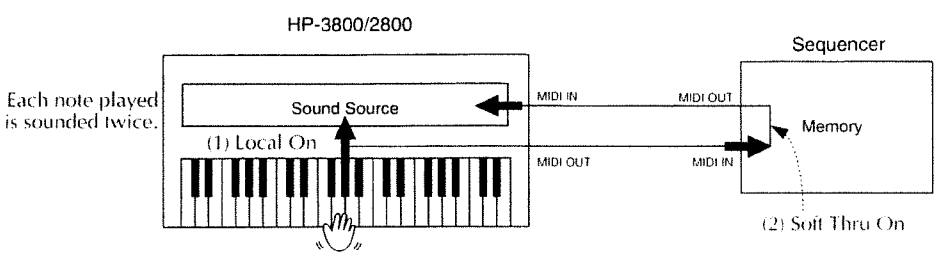
The information below will be helpful when you wish to use your piano in combination with a sequencer*. (One cable should run between the MIDI OUT on this instrument and the MIDI IN on the sequencer, and another should run between the sequencer's MIDI OUT and this unit's MIDI IN.)

* **A sequencer is a device which records and plays back whatever you play on your piano (using the sound source of the piano). The MC-50 is a representative example of a Roland sequencer. Another product, the Roland MT-200, combines both sequencer and sound module in one unit.**

When connections are made as illustrated below, the music you play can be recorded into a sequencer. Then, you can hear a reproduction of it when the sequencer is played back.



If Soft Thru on the sequencer is ON at this time, the same notes will be produced twice. As a result, the sound will seem unnatural, and the maximum number of voices that can be produced at once may be reduced.

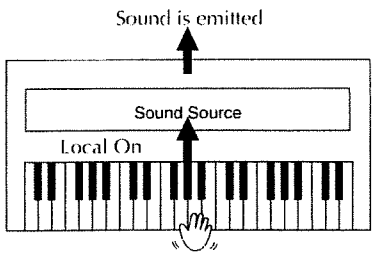


This occurs because the performance data generated by playing the keyboard reaches the internal sound source through two different routes, which are:
(1) The circuit connections within the HP-3800/2800 and
(2) Soft Thru on the sequencer. (A condition whereby a copy of the performance data received at MIDI IN is sent out from MIDI OUT.)

In order to alleviate problems, the first route (1) can be switched out of use. Doing this is referred to as setting the instrument to Local Off. Conversely, the standard mode, where route (1) remains active, is known as Local On.

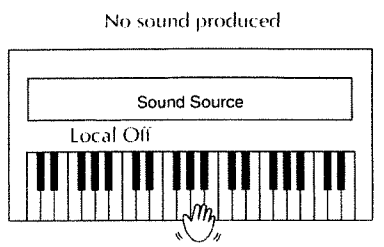
Local On

This is the standard mode, in which the keyboard is connected to its built-in sound source.

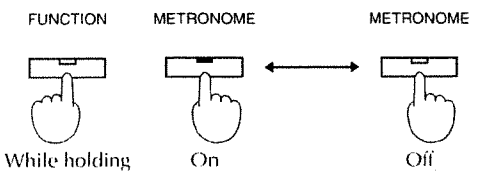


Local Off

In this mode, the keyboard will not be connected to its built-in sound source, and playing the keyboard will not produce any sound.



While holding down the **FUNCTION** button, press the **METRONOME** button to switch between Local ON and OFF.
When the indicator is lit, Local control is ON.



* **Should the piano receive Local Control messages over MIDI, the content of such messages will determine the Local ON/OFF status.**
  The Roland MT-200 transmits Local Off messages when you first power it up.
  Note that if you are using DC OUT to supply power to the MT-200, you should leave the power switch on the MT-200 at ON, and then turn power on or off using the power switch on the HP-3800/2800.
* **If there is no MIDI cable connected to the piano's MIDI IN connector, the mode will automatically be at "Local On".**

The Multi-Timbral Mode

When the Multi-Timbral mode is ON, MIDI data arriving on several channels can be received. This allows you to simultaneously play a number of the piano's sounds (useful for creating ensemble effects).

- **When the Multi-Timbral Mode is OFF**

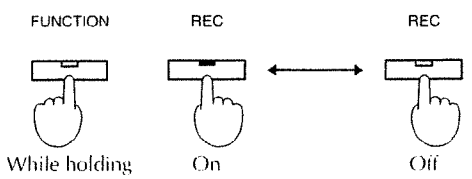
  Data arriving on the set Receive channel (see page 24, 25) is received and used to play the currently selected Voice.

- **When the Multi-Timbral Mode is ON**

  MIDI data arriving on channels 1, 11, 12, 13, 14 and 15 is received. Data on all other channels is ignored.

  The Voice that is used to play the notes will be determined by the Program Change message that is received on the relevant channel. The relationship between Program Change Numbers and Voices is shown on page 30, 31.

While holding down the **FUNCTION** button, press the **REC** button to turn the Multi-Timbral Mode ON or OFF.
When the indicator is lit, the Multi-Timbral Mode is ON.



Messages in the Multi-Timbral Mode

- **Pedal Messages**

  Damper, Sostenuto and Soft pedal messages function independently for each channel; 1, 11, 12, 13, 14 or 15.

- **Volume**

  Volume messages control the volume and function independently for each channel; 1, 11, 12, 13, 14 or 15. Such messages, however, have no effect on what is played on this instrument's keyboard.

  The actual volume obtained is determined by the value of the Volume message, and the position of the **VOLUME** slider on this instrument. When Volume messages at the maximum value are received, the volume produced will reflect the position of the **VOLUME** slider.

- **Chorus On/Off Messages**

  Chorus On/Off messages affect independently for each channel; 1, 11, 12, 13, 14 or 15.

- **Reverb On/Off Messages**

  Reverb On/Off messages affect all Voices identically, regardless of whether they are received on channel 1, 11, 12, 13, 14 or 15.

* **When the Multi-Timbral Mode is ON, the unit will be at Omni OFF.**

The Transmission/Reception Mode

Three Transmission/Reception Modes are available.

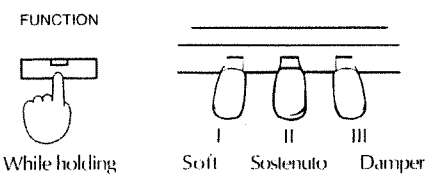
* **Note and Pedal messages can be received and transmitted regardless of the mode selected.**
* **Mode I is the default setting.**

I As you play the keyboard and depress the pedals, only Note and Pedal messages are transmitted and only these kinds of messages are received. Even though you switch Voices, Voice switching (Program Change) messages will not be transmitted. Program Change messages can be received, however.

II This mode is identical to mode I. However, the HP-3800/2800 will not respond to Program Change messages. This is useful when, OMNI is On, and you want to play the piano using messages coming in on all MIDI channels.

III In addition to Note and Pedal messages, a variety of messages about settings can be transmitted and received. When Voices are switched using panel buttons, the appropriate Program Change messages are transmitted. This is the Mode to use when recording a performance on a sequencer.

While holding down the **FUNCTION** button, depress the Soft pedal for mode (I), the Sostenuto pedal for mode (II), or the Damper pedal for mode (III).



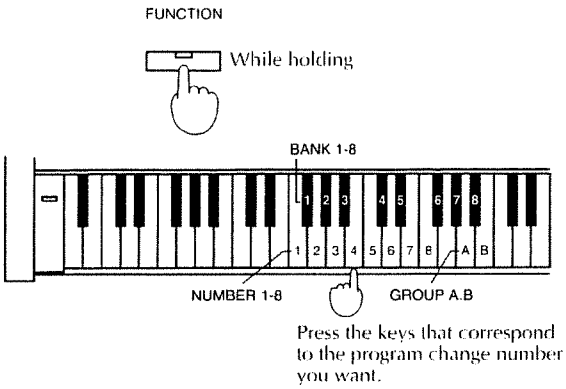
Mode			I		II		III	
MIDI Messages			TX	RX	TX	RX	TX	RX
Note Messages			Yes	Yes	Yes	Yes	Yes	Yes
Program Change Messages			Yes	Yes	Yes	No	Yes*	Yes
Control Change Messages								
	Volume	(7)	No	Yes	No	Yes	No	Yes
	Damper	(64)	Yes	Yes	Yes	Yes	Yes	Yes
	Sostenuto	(66)	Yes	Yes	Yes	Yes	Yes	Yes
	Soft	(67)	Yes	Yes	Yes	Yes	Yes	Yes
	Expression	(11)	Yes	Yes	Yes	Yes	Yes	Yes
	Chorus On/Off	(93)	No	No	No	No	Yes	Yes
	Reverb On/Off	(91)	No	No	No	No	Yes	Yes
	Master Tune	(32)	No	No	No	No	Yes	Yes
Roland System Exclusive Messages								
	Multi-Timbral Mode		No	Yes	No	Yes	Yes	Yes
	Temperament Mode		No	Yes	No	Yes	Yes	Yes
	Chorus Depth		No	Yes	No	Yes	Yes	Yes
	Reverb Depth		No	Yes	No	Yes	Yes	Yes
	Stretched Tuning		No	Yes	No	Yes	Yes	Yes
	Resonance Depth		No	Yes	No	Yes	Yes	Yes
	Brilliance		No	Yes	No	Yes	Yes	Yes

* **When you press a Voice button in Transmission/Reception Mode III, the appropriate Program Change message will be transmitted.**

Transmitting and Receiving Program Change Messages

- **Transmitting**

  Program Change messages can be sent in the following way:
  While holding down the **FUNCTION** button, press the keys corresponding to the Group, Bank, and Number which make up the desired Program Change message.



Group A

Bank \ Number	1	2	3	4	5	6	7	8
1	1	2	3	4	5	6	7	8
2	9	10	11	12	13	14	15	16
3	17	18	19	20	21	22	23	24
4	25	26	27	28	29	30	31	32
5	33	34	35	36	37	38	39	40
6	41	42	43	44	45	46	47	48
7	49	50	51	52	53	54	55	56
8	57	58	59	60	61	62	63	64

Group B

Bank \ Number	1	2	3	4	5	6	7	8
1	65	66	67	68	69	70	71	72
2	73	74	75	76	77	78	79	80
3	81	82	83	84	85	86	87	88
4	89	80	91	92	93	94	95	96
5	97	98	99	100	101	102	103	104
6	105	106	107	108	109	110	111	117
7	113	114	115	116	117	118	119	120
8	121	122	123	124	125	126	127	128

* **When you press a Voice button in Transmission/Reception Mode III, the appropriate Program Change message will be transmitted.**

1 PIANO 1
2 PIANO 2
4 HARPSICHORD
5 VIBRAPHONE
6 E.PIANO
7 PIPE ORGAN
8 STRINGS
10 PIANO 1+PIANO 2
12 PIANO 1+HARPSICHORD
13 PIANO 1+VIBRAPHONE
14 PIANO 1+E.PIANO
15 PIANO 1+PIPEORGAN
16 PIANO 1+STRINGS
20 PIANO 2+HARPSICHORD
21 PIANO 2+VIBRAPHONE
22 PIANO 2+E.PIANO
23 PIANO 2+PIPEORGAN
24 PIANO 2+STRINGS
37 HARPSICHORD+VIBRAPHONE
38 HARPSICHORD+E.PIANO
39 HARPSICHORD+PIPEORGAN
40 HARPSICHORD+STRINGS
46 VIBRAPHONE+E.PIANO
47 VIBRAPHONE+PIPEORGAN
48 VIBRAPHONE+STRINGS
55 E.PIANO+PIPEORGAN
56 E.PIANO+STRINGS
64 PIPEORGAN+STRINGS

- **Receiving**

  When a Program Change message is received, the corresponding Voice is selected as shown here:

1 PIANO 1	37 HARPSICHORD+VIBRAPHONE
2 PIANO 2	38 HARPSICHORD+E.PIANO
3 PIANO 2	39 HARPSICHORD+PIPEORGAN
4 HARPSICHORD	40 HARPSICHORD+STRINGS
5 VIBRAPHONE	41 PIANO 1+VIBRAPHONE
6 E.PIANO	42 PIANO 2+VIBRAPHONE
7 PIPE ORGAN	43 PIANO 2+VIBRAPHONE
8 STRINGS	44 HARPSICHORD+VIBRAPHONE
9 PIANO 1	45 VIBRAPHONE
10 PIANO 1+PIANO 2	46 VIBRAPHONE+E.PIANO
11 PIANO 1+PIANO 2	47 VIBRAPHONE+PIPEORGAN
12 PIANO 1+HARPSICHORD	48 VIBRAPHONE+STRINGS
13 PIANO 1+VIBRAPHONE	49 PIANO 1+E.PIANO
14 PIANO 1+E.PIANO	50 PIANO 2+E.PIANO
15 PIANO 1+PIPEORGAN	51 PIANO 2+E.PIANO
16 PIANO 1+STRINGS	52 HARPSICHORD+E.PIANO
17 PIANO 1+PIANO 2	53 VIBRAPHONE+E.PIANO
18 PIANO 2	54 E.PIANO
19 PIANO 2	55 E.PIANO+PIPEORGAN
20 PIANO 2+HARPSICHORD	56 E.PIANO+STRINGS
21 PIANO 2+VIBRAPHONE	57 PIANO 1+PIPEORGAN
22 PIANO 2+E.PIANO	58 PIANO 2+PIPEORGAN
23 PIANO 2+PIPEORGAN	59 PIANO 2+PIPEORGAN
24 PIANO 2+STRINGS	60 HARPSICHORD+PIPEORGAN
25 PIANO 1+PIANO 2	61 VIBRAPHONE+PIPEORGAN
26 PIANO 2	62 E.PIANO+PIPEORGAN
27 PIANO 2	63 PIPEORGAN
28 PIANO 2+HARPSICHORD	64 PIPEORGAN+STRINGS
29 PIANO 2+VIBRAPHONE	65 PIANO 1+STRINGS
30 PIANO 2+E.PIANO	66 PIANO 2+STRINGS
31 PIANO 2+PIPEORGAN	67 PIANO 2+STRINGS
32 PIANO 2+STRINGS	68 HARPSICHORD+STRINGS
33 PIANO 1+HARPSICHORD	69 VIBRAPHONE+STRINGS
34 PIANO 2+HARPSICHORD	70 E.PIANO+STRINGS
35 PIANO 2+HARPSICHORD	71 PIPEORGAN+STRINGS
36 HARPSICHORD	72 STRINGS

*** If any Program Changes numbered from 73-128 are received, they will be ignored.**

Troubleshooting

Whenever you suspect that the instrument is not performing as it should, please consult the following information.

Q. **No sound is heard from the speakers.**

A.
- Is the Local control set to OFF?
- Are headphones connected to the PHONES jack?
- Are all external devices (if any) turned on?
- If you are in the Multi-timbral Mode, do you have the Transmit channel of the connected device set to something other than 1, 11, 12, 13, 14, or 15?

Q. **The damper effect is constantly applied to notes played or the damper effect cannot be obtained at all.**

A.
- Is the cable from the stand connected properly to the main unit? Refer to Assembly (pages 4 and 5) and connect the cable properly.

Q. **Notes played on the keyboard are too high (or low) in pitch.**

A.
- Is Key Transposition in effect? (If Key Transpose has been set, the indicator on the **FUNCTION** button will be lit.) Press the **FUNCTION** button to cancel Key Transposition (the indicator will go out.)
- Do you have the Master Tuning set appropriately?

Q. **Data in the recorder has disappeared.**

A.
- Performance data in the recorder will disappear approx. 8 hours after the power is turned off. Regrettably, there is no way to restore such data once it has been lost. If you need a more permanent form of storage, you will need to use a sequencer (Roland's MC-50 or MT-200) to record your songs on floppy disks.
- Have you possibly pressed the **REC** button while you had the Track button held down?

Q. **The pitch differs from that of Roland ISM products, or another manufacturer's sound generating unit.**

A.
- Be sure the Tuning knob on the rear of the piano hasn't been inadvertently moved. Refer to Master Tuning (page 12), then adjust the Tuning knob until the piano matches the pitch of the external unit(s).

Q. **Operations performed using the panel buttons (such as switching Chorus/Reverb on or off, or Voice selections) cannot be recorded in a sequencer.**

A.
- Is the Transmission/Reception Mode set to mode III? Note that each time the power is turned on, the piano will be in mode I. In order to record operations you perform using the panel buttons, the piano must be set to mode III.

DIGITAL PIANO
Model HP-3800/2800
(Normal Mode)

MIDI Implementation Chart

Date:Aug. 7, 1992
Version:1.00

Function...		Transmitted	Recongnized	Remarks
Basic	Default	1	1	
Channel	Changed	1-16	1-16	
	Default	Mode 3	Mode 3	
Mode	Messages	OMNI OFF, POLY	o	*2
	Altered	**********	*3	
Note		15-113	0-127	
Number	True voice	**********	15-113	
Velocity	Note ON	o	o	
	Note OFF	o 8n v=1-127	o	
After	Key's	x	x	
Touch	Ch's	x	x	
Pitch Bend		x	x	
Control	6,38	o	o	Data Entry
Change	7	x	o	Volume
	11	o	o	Expression
	64	o	o	Hold-1
	66	o	o	Sostenuto
	67	o	o	Soft
	91	*1	*1	Reverb
	93	*1	*1	Chorus
	100,101	o	o	RPN LSB, MSB
	121	x	o	Reset All Controllers
Prog		*1 (0-127)	*1 (0-127)	
Change	True #	**********	0-71	
System Exclusive		o	o	
System	Song Pos	x	x	
	Song Sel	x	x	
Common	Tune	x	x	
System	Clock	x	x	
Real Time	Commands	x	x	
	Local ON/OFF	x	o	
Aux	All Notes OFF	x	o (123-127)	
Messages	Active Sense	o	o	
	Reset	x	x	
Notes		*1 Able to chose between O and X. *2 When power on OMNI OFF and POLY are sent through the basic channnel. *3 Recognized as Mode 3 even if MONO (M = 1). Recognized as Mode 1 even if MONO (M ≠1).		

Mode 1 : OMNI ON , POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

DIGITAL PIANO
Model HP-3800/2800
(Multi Timbre Mode)

MIDI Implementation Chart

Date:Aug. 7, 1992
Version : 1.00

Function...		Transmitted	Recongnized	Remarks
Basic	Default	1	1	
Channel	Changed	1-16	1, 11, 12, 13, 14, 15	
	Default	Mode 3	Mode 3	
Mode	Messages	OMNI OFF, POLY	x	*2
	Altered	**********		
Note		15-113	0-127	
Number	True voice	**********	15-113	
Velocity	Note ON	o	o	
	Note OFF	o 8n v=1-127	o	
After	Key's	x	x	
Touch	Ch's	x	x	
Pitch Bend		x	x	
Control	6,38	o	o	Data Entry
Change	7	x	o	Volume
	11	o	o	Expression
	64	o	o	Hold-1
	66	o	o	Sostenuto
	67	o	o	Soft
	91	*1	*1	Reverb
	93	*1	*1	Chorus
	100,101	o	o	RPN LSB, MSB
	121	x	o	Reset all controllers
Prog		*1 (0-127)	*1 (0-127)	
Change	True #	**********	0-71	
System Exclusive		o	o	
System	Song Pos	x	x	
	Song Sel	x	x	
Common	Tune	x	x	
System	Clock	x	x	
Real Time	Commands	x	x	
	Local ON/OFF	x	o	
Aux	All Notes OFF	x	o (123-127)	
Messages	Active Sense	o	o	
	Reset	x	x	
Notes		*1 Able to chose between o and x. *2 When power on, OMNI OFF and POLY are sent through the basic channel.		

Mode 1 : OMNI ON , POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

Specifications

	HP-3800	HP-2800
Keyboard	88 keys; Weighted-counterlever mechanism	
Sound Source	Advanced SA Process	
Voices	Piano 1, Piano 2, Harpsichord, Vibraphone, Electric Piano Pipe Organ, Strings, Honky-Tonk Piano (Layer Mode)	
Digital Effects	Chorus (7 levels) Reverb (7 levels)	
Temperament (Tunings)	Equal, Pythagorean, Just (major or minor), Mean Tone, Werckmeister, Kirnberger	
Key Touch	Light, Medium, Heavy, Full	
Stretched Tuning	OFF (Standard), Mode I, Mode II	
Controls	Volume, Brilliance, Master Tune, Key-Transpose	
Recorder	2 tracks (Each track can be muted), approx. 2,500 notes	
Metronome	0/4, 2/4, 3/4, 4/4, 6/4, Tempo range : 40-200, Volume : 7 levels	
Connectors	Output Jacks (Stereo), Input Jacks (Stereo/Mono), Pedal Jacks (8-pin DIN Connector) MIDI IN , MIDI OUT , MIDI THRU , DC OUT , Headphone Jack	
Pedals	Damper*, Soft*, Sostenuto (* Half-pedal recognition)	
Speakers	20 cm X 2 plus 5 cm x 4	16 cm X 2
Output	40 W X 2 (Total 80 W)	30 W X 2 (Total 60 W)
Finish	Roland Traditional Walnut	Briazilian Rosewood
Power Consumption	115 W (120V), 105 W (230V, 240V)	100 W (120V), 85 W (230V, 240V)
Dimensions	HP-3800:1459(W) X 554(D) X 241(H) mm 57-1/2"(W) X 21-13/16"(D) X 9-1/2"(H) KS-3800:1451(W) X 503(D) X 837(H) mm 57-1/8"(W) X 19-13/16"(D) X 33"(H) Total:1459(W) X 554(D) X 859(H) mm 57-1/2"(W) X 21-13/16"(D) X 33-7/8"(H)	HP-2800:1440(W) X 500(D) X 204(H) mm 56-3/4"(W) X 19-11/16"(D) X 8-1/16"(H) KS-2800:1446(W) X 455(D) X 604(H) mm 56-15/16"(W) X 17-15/16"(D) X 23-13/16"(H) Total:1446(W) X 500(D) X834(H) mm 56-15/16"(W) X 19-11/16"(D) X 32-7/8"(H)
Weight	HP-3800 : 54kg 119 lbs 1oz KS-3800 : 25.5kg 56 lbs 4oz Total : 79.5kg 175 lbs 5oz	HP-2800 : 43.2kg 95 lbs 4oz KS-2800 : 18kg 39 lbs 11oz Total : 61.2kg 134 lbs 15oz
Accessories	Music Rest, Power Cable, Owner's Manual	
Options	Keyboard Stand (KS-3800) Piano Chair	Keyboard Stand (KS-2800) Piano Chair

*** In the interest of product improvement, the specifications of this unit are subject to change without prior notice.**

For Germany

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

Roland Digital Piano HP3800/2800

(Gerät. Typ. Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046/1984

(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

Name des Herstellers/Importeurs

For the USA

RADIO AND TELEVISION INTERFERENCE

WARNING — This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equipment is likely to result in interference to radio and TV reception.

The equipment described in this manual generates and uses radio frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J, of Part 15, of FCC Rules. These rules are designed to provide reasonable protection against such a interference in a rasidential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

- Disconnect other devices and their input/output cables one at a time. If the interference stops, it is caused by either the other device or its I/O cable.
  These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non Roland devices, contact the manufacturer or dealer for assistance.
  If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures.
- Turn the TV or radio antenna until the interference stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV. If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission:
  "How to Identify and Resolve Radio — TV Interference Problems"
  This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

For Canada

CLASS B **NOTICE**

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

CLASSE B **AVIS**

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Réglement des signaux parasites par le ministère canadien des Communications.

Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

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Norderstedt, GERMANY
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As of Jan 8. 1992

HP 380V/ 630V

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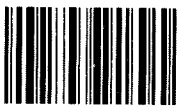

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